

D. Remarks

The claims are 1, 2, 4-28 and 30-56, with claims 1, 14, 26 and 42 being independent. Claims 3 and 26 have been cancelled. Claims 1, 14, 26 and 42 have been amended to better define the present invention. Support for this amendment may be found, inter alia, in cancelled claims 3 and 29 and throughout the specification and the drawings. Claims 9, 30, 35 and 37 have been amended to reflect the cancellation of claims 3 and 26. Also, the Abstract has been amended to correct an informality. No new matter has been added. Reconsideration of the present claims is expressly requested.

Claim 7 is objected to by the Examiner. Specifically, the Examiner alleges that in claim 7, line 2, the phrase “the thickness” lacks antecedent basis. Applicants respectfully disagree.

Claim 1 recites “a thickness of an elastic member” and page 14, lines 8-10 provides specific support for that phrase. Accordingly, the objection to claim 7 should be withdrawn.

The Abstract is objected to by the Examiner because of an informality. Since Applicants have corrected the informality by the above amendment, this objection should be withdrawn.

Claims 14-16, 19, 20, 23, 42, 44, 45, 48, 49, 52 and 55 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,519,472 (Ojima). Claims 14, 15, 17, 19, 42, 44, 46, 48 and 56 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,353,104 (Kato). Claims 17, 18, 21, 22, 46, 47, 50 and 51 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima in view of U.S. Patent No. 6,115,575 (Kinoshita). Claims 24 and 53 stand rejected

under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima in view of U.S. Patent No. 5,999,784 (Tsukida). Claims 25 and 54 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima in view of U.S. Patent No. 5,645,966 (Koga). Claims 1-4, 7, 8, 11, 26, 28-30, 33, 34, 37 and 40 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima in view of U.S. Patent No. 4,566,991 (Sibilia). Claims 1-3, 5, 7, 26, 28, 29, 31, 33 and 41 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Kato in view of Sibilia. Claims 5, 6, 9, 10, 31, 32, 35 and 36 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima, as modified by Sibilia, and further in view of Kinoshita. Claims 12 and 38 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima, as modified by Sibilia, and further in view of Tsukida. Claims 13 and 39 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima, as modified by Sibilia, and further in view of Koga. Claim 27 stands rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima, as modified by Sibilia, and further in view of U.S. Patent No. 5,570,166 (Ohzeki). Claim 43 stands rejected as being allegedly under 35 U.S.C. § 103(a) as being allegedly obvious from Ojima in view of Ohzeki. The grounds of rejection are respectfully traversed.

Prior to addressing the merits of rejection, Applicants would like to briefly review some of the key features and advantages of the presently claimed invention. The present invention is directed to a developer regulating member and an apparatus employing it. The developer regulating member comprises an elastic member, which contacts a developer carrying member. The elastic member is a polyamide elastomer.

The elastic member has a thickness that is not more than 300 μm . Thus, the degree of deformation of the developing member is so small that the developer regulating

member can appropriately regulate the amount of the developer. Also, the elastic member can have a resistance of $10^4 \Omega$ (claims 1 and 26). Thus, the elastic member is able to prevent the developer from fusing and sticking to the developer regulating member.

Ojima is directed, in part, to a developing apparatus. Ojima discloses a developing blade 28, which comprises a polyamide resin high resistance layer 28b having a thickness of approximately 40 μm . However, layer 28b does not contact a developing sleeve 8 and is not a polyamide elastomer (col. 7, lines 37-53; Fig. 5). Thus, it is clear that the layer 28b in Ojima does not correspond to the elastic member according to the presently claimed invention, wherein the polyamide elastomer elastic member contacts the developer carrying member. Ojima does not disclose or suggest an elastic member as presently claimed. Also, this reference does not disclose or suggest the claimed thickness of the elastic member.

Kato is directed, in part, to a defining member, which is said to define the thickness of a layer of a one-component developer employed for developing an electrostatic latent image. Kato discloses an elastic blade 26, which is composed of a rubber base blade 26a whose surface is coated with a polyamide resin binder surface layer 26b in which particles of, for example, polyfluorinated vinylidene resin are dispersed. However, surface layer 26b is a resin, not a polyamide elastomer. Thus, like Ojima, Kato fails to disclose or suggest an elastic member as presently claimed. Also, this reference does not disclose or suggest the claimed thickness of the elastic member.

Kinoshita cannot cure the deficiencies of Ojima and Kato. Kinoshita is directed, in part, to a developing apparatus. Kinoshita discloses a developing blade 10 in which a polyamide elastomer layer 10b is provided on a phosphor bronze plate 10a.

However, the thickness of layer 10b is 1 mm, which is substantially greater than the presently claimed maximum thickness of the polyamide elastomer, which is 300 μm (col. 10, line 24).

In the context of the present invention, a reasonable thickness of the elastic member generally depends on a specific material used as an elastic member. Therefore, borrowing Kinoshita's polyamide elastomer layer 10b to modify another apparatus (e.g., Ojima and Kato) invariably involves using the same thickness as in Kinoshita, i.e., 1 mm. Therefore, Kinoshita cannot be combined with Ojima and/or Kato to render the presently claimed invention unpatentable.

Sibilia also cannot provide the teachings missing in Ojima and Kato. This reference was cited for the alleged disclosure of polyamide resistivity. Even if assumed, *arguendo*, that Sibilia contains the alleged teaching, Applicants respectfully submit that this reference cannot be combined with Ojima and/or Kato to affect the patentability of the presently claimed invention, because Sibilia does not disclose or suggest a polyamide elastomer elastic member with a thickness of not more than 300 μm that contacts the developer carrying member. In fact, Sibilia is not even related to the present field of endeavor.

Tsukida, Koga and Ohzeki cannot cure the deficiencies of the above-discussed references. Tsukida, Koga and Ohzeki were cited for their alleged disclosure of subject matter related to various dependent claims. Even if assumed, *arguendo*, that Tsukida, Koga and Ohzeki contain the alleged teachings, Applicants respectfully submit that these references cannot be used to affect the patentability of the presently claimed

invention, because they do not disclose or suggest a polyamide elastomer elastic member with a thickness of not more than 300 μm that contacts the developer carrying member.


In conclusion, Applicants respectfully submit that none of the cited references, whether considered separately or in any combination, disclose or suggest the combination of elements presently claimed.

Wherefore, Applicants respectfully request that the outstanding objections and rejections be withdrawn and the present case be passed to issue.

As a formal matter, Applicants enclose a copy of an Office Action, which was issued in a corresponding Korean application. Since the only reference cited in this Korean Office Action is Ohzeki, which is already of record in the subject application, no Information Disclosure Statement is deemed necessary.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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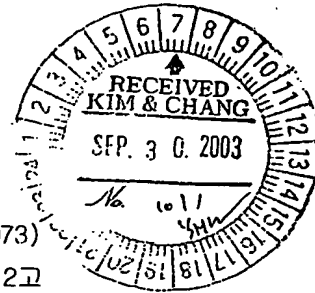
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특허청 의견제출통지서



출원인 명칭 캐논 가부시끼가이샤 (출원인코드: 519980959073)
주소 일본 도쿄도 오오따구 시모마루코 3쵸메 30방 2고
대리인 성명 장수길 외 2 명
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발명의 명칭 현상제 조절 부재와 이를 포함하는 현상 장치

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[이유]

이 출원의 특허청구범위 제 1-7,9,11,14-19,21,23,26,28-33,35,3741,42,44-48,50,52,56항에 기재된 발명은 그 출원전에 이 발명이 속하는 기술분야에서 통상의 지식을 가진 자가 아래에 지적한 것에 의하여 용이하게 발명할 수 있는 것이므로 특허법 제29조제2항의 규정에 의하여 특허를 받을 수 없습니다.

아래

1. 청구범위 제 1-7,9,11,14-19,21,23,26,28-33,35,3741,42,44-48,50,52,56항발명은 현상제량을 규제하는 블레이드의 탄성층의 구성적특징에 관한것이나 미국 공보 5570166호(이하 인용발명)발명과 비교해 볼때 목적및 구성이 유사한바 이분야에서 통상의 지식을 가진자라면 상기 인용발명으로부터 본원의 1-7,9,11,14-19,21,23,26,28-33,35,3741,42,44-48,50,52,56항 발명을 용이하게 발명할 수 있습니다.

[참 부]

첨부1 미국특허공보 05570166호(1996.10.29) 1부 끝.

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<<안내>>

문의사항이 있으시면 ☎ 042-481-5763 로 문의하시기 바랍니다.

특허청 직원 모두는 깨끗한 특허행정의 구현을 위하여 최선을 다하고 있습니다. 만일 업무처리과정에서 직원의 부조리행위가 있으면 신고하여 주시기 바랍니다.

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